WonderHere WORLD TRAVELER 

# World Traveler Math Project

#### Introduction

As you spend this unit learning about different places around the world, YOU will become a world traveler! And did you know? World travelers need to have some important math skills up their sleeves to make their travels smooth sailing! For the next six weeks, you will be preparing for your big trip by reading maps, understanding the distances you are traveling, budget for your trip, pack an imaginary bag, and so much more! Math is everywhere. Let's use it to take a TRIP!

### TASK 1: Map Out Your Journey!

**Instructions:** Below is your plane ticket! Check out the destination you are headed and look for it on the map. Circle this destination.



Hip, hip, HOORAY! You are heading to CAIRO, EGYPT! How exciting! Where could that be on the map? Circle it! Locate the United States of America. Circle that too! Can you find the peninsula where Florida is on the map?



#### TASK 2: Measureing Distance in Non-Standard Units

**Instructions:** Find the two circles you made on the map. Use non-standard units to measure the distance on the map between the two circles you drew representing your location and your destination found on your boarding pass.

Non-standard units to measure refers to a measurement tool that is not typically use. and often used when a ruler or measuring tape is not handy.

Answer the following questions:
1. How many paper clips is the distance between Florida and Egypt?
2. How many erasers is the distance between Florida and Egypt?
2. How many erasers is the distance between Florida and Egypt:
3. Choose something else to use as a non-standard unit of measurement. What did you use? How many units of this item is the distance between Florida and Egypt?

#### TASK 3: Measuring Distance in Standard Units Inches

**Instructions:** Find the two circles you made on the map. Use standard units to measure the distance on the map between the two circles you drew representing your location and your destination found on your boarding pass.

**Standard units of measurement** refers to a measurement tool that is typically used:

ruler, measuring tape, etc...

	Using a ruler, determine how many inches is the distance between Florida and Egypt?
•	

### TASK 4: Paper Airplanes

**Instructions:** Make your very best paper airplane and cut out the two continents that will represent your journey. Using these, place the North American continent at your feet and practice throwing your paper airplane a good distance. Place your Africa continent where your plane landed. Use both standard and non-standard units of measurement to measure how far your paper airplane took you and the distance that separates North America from Africa.

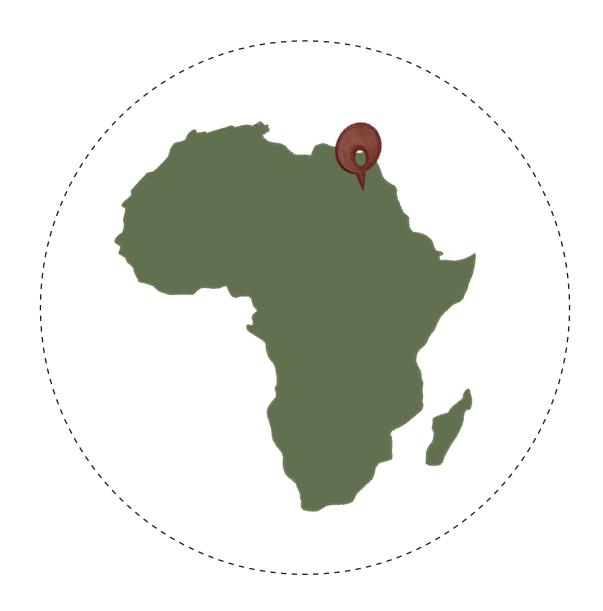
#### **Non-Standard Units of Measurement**

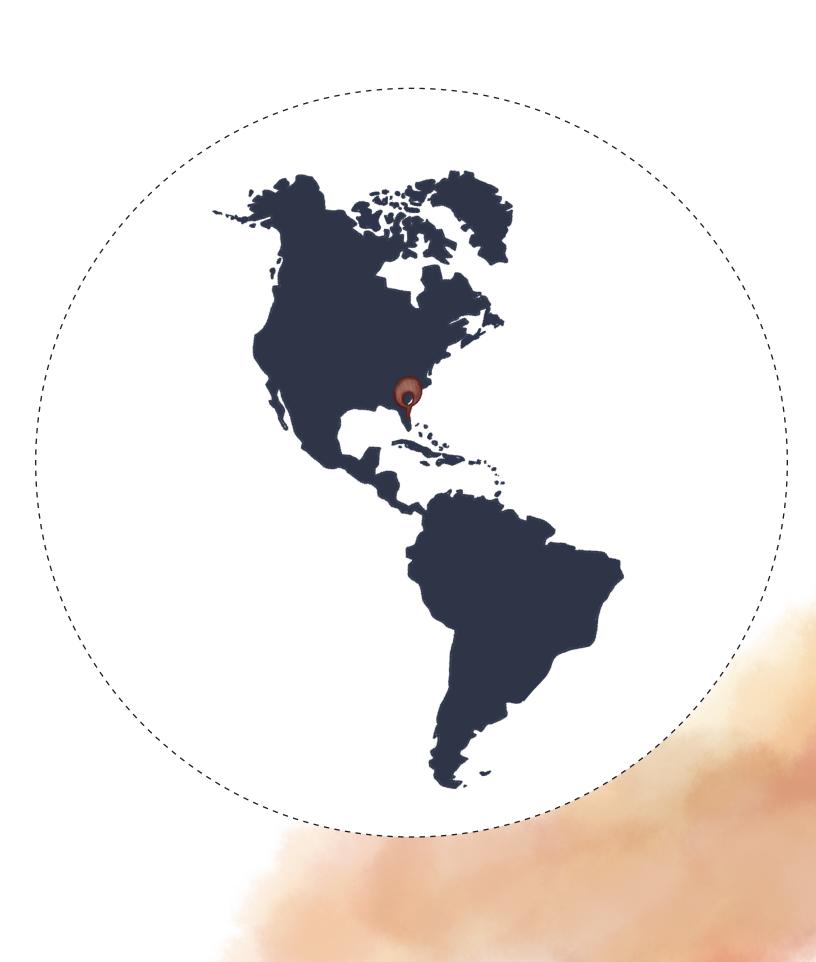
**Flight 1:** How far did your paper airplane travel? What is the distance between North America and Africa in non-standard units of measurement?

units of	(items)
411165 61	(1001110)

**Flight 2:** How far did your paper airplane travel? What is the distance between North America and Africa in non-standard units of measurement?

\_\_\_\_\_ units of \_\_\_\_\_ (item)





**Standard Units of Measurement**: Place your cut out of the continent North America on the floor. Using a ruler, measure 3 feet. Place the cut out of the continent of Africa here. This is a representation of a "to scale" distance between North America and Africa

**To scale** means the relationship (ratio) of the real thing to what is drawn or shown on paper

Throw your paper airplane from one continent to the other and see if your plane can make the flight.

Flight 1: Did you plane make the flight? (Circle one.)

YES or NO

Flight 2: Did you plane make the flight? (Circle one.)

YES or NO

Flight 3: Did you plane make the flight? (Circle one.)

YES or NO

#### TASK 5: Time Travel

**Instructions:** : A non-stop flight from Orlando, Florida to Cairo, Egypt takes about 15 hours. That

is how long it would take to watch the Disney movie "Frozen" 7 times!!! Think about what else you could do for the same amount of time as it would take for you to fly							

### TASK 6: Budgeting

**Instructions:** Traveling costs money. Often, please work hard to save up the money that they have to be prepared for the costs of a trip. Using counting on and skip counting are two important tools that can help travelers prepare for their trip.

**Skip counting** is when you repeatedly count by the same number. It connects with the strategy of repeated addition. The most common ways to skip count are by 2's, 5's, and 10's. Let's practice skip counting & repeated addition

Use skip counting to count by 2's

-,-,-,-

Use skip counting to count by 5's

-,-,-,-



Use repeated addition Example: 5+5+5+5+5=25



use repeated addition



# use repeated addition

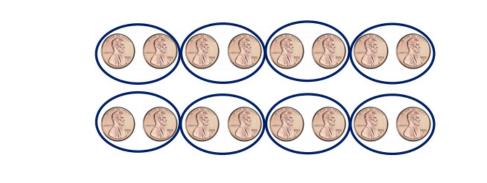








Example: 5, 10, 15, 20



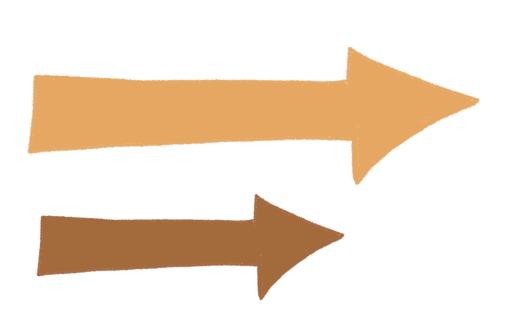


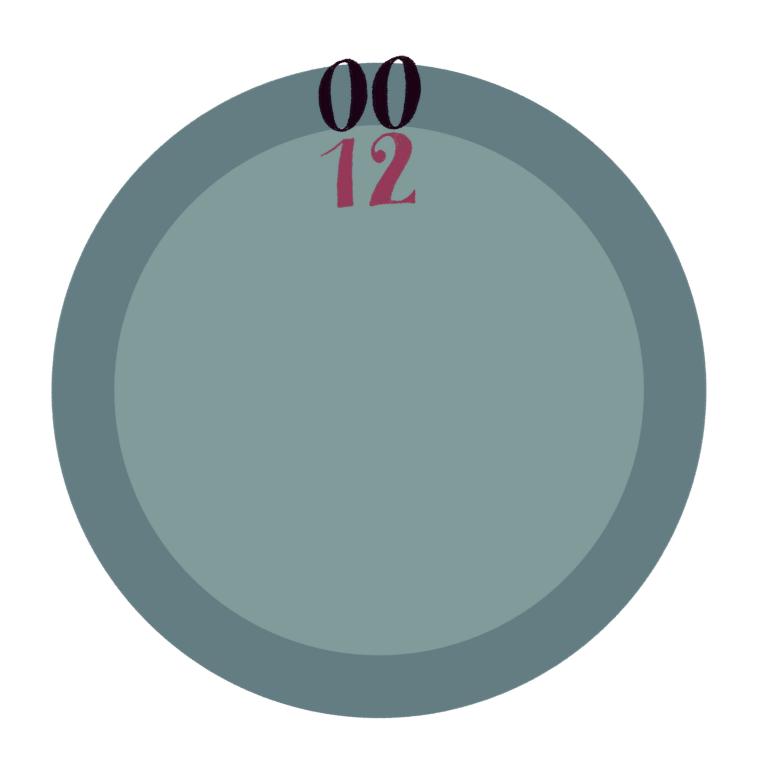
### TASK 7: Traveling Takes Time (Part 1)

**Instructions:** Let's work on your understanding of telling time in preparation for your big trip to Cairo, Egypt!

#### Steps to Make an Analog Clock!

- Step 1: Cut out the circle below and two hands of the clock (see below).
- Step 2: Using a circular clock from home as guidance, place the numbers 1-11 around the inner circle of the clock. The 12 has been done for you. The numbers 1 12 represent the hours.
- Step 3: In the outer circle, you will count by 5's and place the numbers 05-55 matching with the numbers you placed on the inside. The 00 has been done for you. The numbers 00 55 represent the minutes.
- Step 4: The shorter hand is what tells the hour. Write the word hour on the shorter hand that you cut out.
- Step 5: The longer hand is what tells the minutes. Write the word minutes on the long hand.
- Step 6: Attach the hands to the dot in the middle of the clock. You will want them to be movable. A paper fastener or brad is best, but you can also use a paper clip or pencil to hold it in place temporarily while you move the hands of the clock.





**Instructions:** When waiting at the gate for your plane to board, riding on an airplane, and many moments before and after that, traveling takes time. You need to be able to read a clock to know what time it is and how much time has passed!

#### How to Read a Digital Clock

Step 1: Read the first number. It's a 4. This number represents the hours in the day or night.

Step 2: Read the number after the :. It's the number 30. These numbers represents how many minutes have passed in the hour.

Step 3: Is it am or pm? Am means that it is the morning, pm means that it is evening.

4:30 PM

#### **How to Read an Analog Clock**

Step 1: Find the hour on the clock. Use the numbers in the white space counting from 1 – 12. Look at the shorter hand on the clock, this is called the hour hand. What number is it pointing to? It's a 4. This number represents the hours.

Step 2: Find the minutes on the clock. Use the numbers counting by 5's in the blue area. Look at the longer hand on the clock, this is called the minute hand. What number is it pointing to? It's 00. These numbers represents how many minutes have passed in the hour.

Step 3: AM or PM? Determine if it is am or pm using your knowledge of day and night.



The time on the clock is 4:00.

**Instructions:** Use your new clock to practice making these times!

3:30

5:00

9:30

2:00

7:00

12:30

#### Stretch it out!

Explore around your home and count how many digital clocks and analog clocks you have. Don't forget about watches and phones J Jot down your answers below.

\_\_\_\_\_ digital clocks

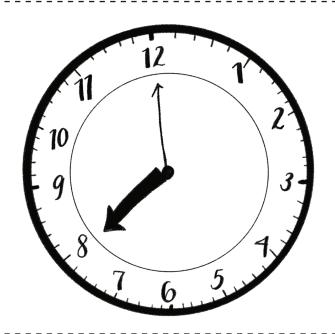
\_\_\_\_\_ analog clocks



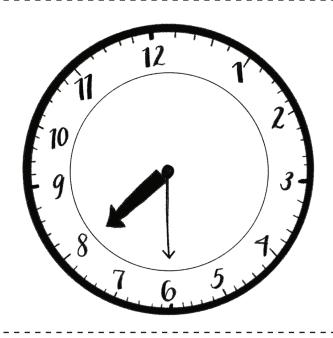
Instructions: Cut out the task cards. Match the times on the digital clocks with the analog clocks.

4:30 10:00

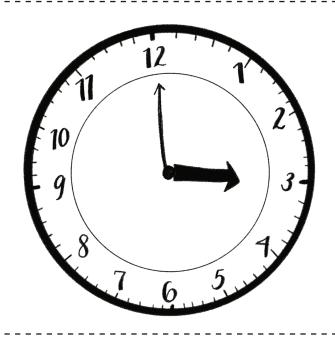
11:30



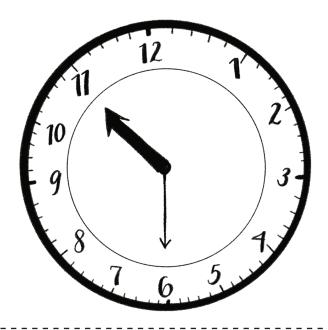
3:00



8:30



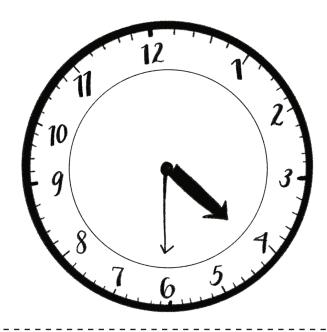
8:00



1:30



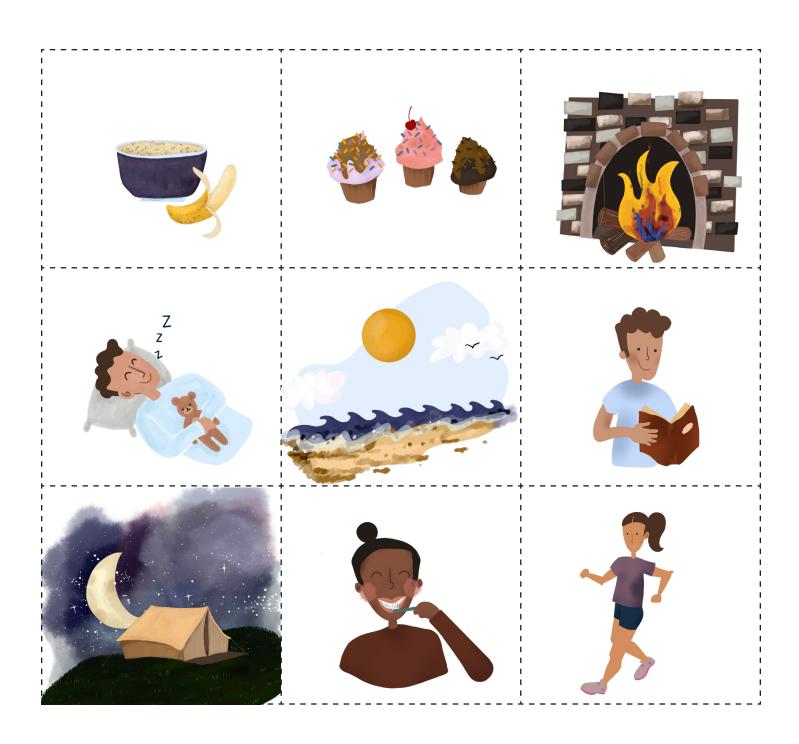
6:00



**Instructions:** Once you have arrived on your trip, you will have time to relax, explore, and have fun! You will have activities that can be done in the AM and in the PM.

**AM** refers to the time between midnight and noon (the morning hours). **PM** refers to the time after noon and before midnight (evening and night hours).

Cut out the pictures and decide if they happen in the AM, PM, or both. Place or glue them in the matching area on the labeled page.



AM
PM
BOTH

**Instructions:** Using the times below, organize your schedule for your first day in Cairo, Egypt! What do you want to do? Eat macaroni and cheese, go to a pool party, gaze beneath the stars? Get creative! You are on vacation and can do any activities you would like. Add your ideas next to the time that would be appropriate.

7:00 AM	
9:30 AM	
II:00 AM	
12:30 AM	

2:30 PM	
5:00 PM	
7:00 PM	
9:30 PM	

### TASK 8: Calendar Math

**Instructions:** You are READY! Your trip is almost here! Are you getting excited? Let's find out how many days until your trip. The best way to do that, is to read a calendar. Use the calendars below to answer the following questions.

September 2019							
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
1	2	3	4	5	6	7	
8	9	10	11	12	13	14	
15	16	17	18	19	20	21	
22	23	24	25	26	27	28	
29	30						

October 2019								
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday		
		1	2	3	4	5		
6	7	8	9	10	11	12		
13	14	15	16	17	18	19		
20	21	22	23	24	25	26		
27	28	29	30	31				

November 2019							
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
					1	2	
3	4	5	6	7	8	9	
10	11	12	13	14	15	16	
17	18	19	20	21	22	23	
24	25	26	27	28	29	30	

December 2019							
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
1	2	3	4	5	6	7	
8	9	10	11	12	13	14	
15	16	17	18	19	20	21	
22	23	24	25	26	27	28	
29	30	31					

January 2020							
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
			1	2	3	4	
5	6	7	8	9	10	11	
12	13	14	15	16	17	18	
19	20	21	22	23	24	25	
26	27	28	29	30	31		

February 2020						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29

March 2020						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

April 2020						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	(18)
19	20	21	22	23	24	25
26	27	28	29	30		

### Months of the Year

January
February
March
April
May
June
July
August
September
October
November

December

## Days of the Week

Monday Tuesday Wednesday Thursday Friday Saturday Sunday

**Instructions:** Answer the following questions using the calendar above.

- 1. How many days are in the month of January?
- 2. How many days are in the month of April?
- 3. What month comes before April?
- 4. What month are you in right now?
- 5. Circle today's date on the calendar.
- 6. Find the date of your trip to Cairo, Egypt on April 18th, 2020. It is circled in red. Color it in yellow.
- 7. Use the calendar to count from today's date to April 18th, 2020. How many days until your trip?

## TASK 9: Pack your Bag & Bon Voyage!

**Instructions:** You're on your way! Check the weather in Cairo, Egypt and think about what you will need to pack. Draw these items on the suitcase below. HAVE A SAFE TRIP!

